

EXHIBIT 3

1 testimony?

2 A. It is my understanding -- I'm not a lawyer
3 so I did not interpret the -- the legal aspect, but
4 -- of her decision, but there are several statements
5 ~~on laborers~~ ^{labels} were tested, the direct statements, and
6 from what I recall, again, that case is several
7 years ago, but there were some -- some statements
8 were quite long, like a sentence, 10, 12, 15 words,
9 and other ones were more like two or three buzz
10 words. And so for the conjoint, where the
11 participants see the attributes on a screen when
12 they do the -- the internet survey, it's a common or
13 global best practices for --

14 [Reporter requests clarification.]

15 THE WITNESS: Best practices for surveys
16 that you don't call attention to something. So I
17 explained the concept to my client and then she
18 basically took the longer statements and summarized
19 them so that everything in the end was four or five
20 words long. And that was, at least in my
21 understanding, the main point that the -- the judge
22 decision said that she -- in her opinion, it does
23 not test the exact statement and therefore was not
24 able to quantify damages. And I forgot how many
25 statements there were, but there was one I remember

1 analysis?

2 A. The first time -- I mean, first of all,
3 I'm a trained statistician and my -- my focus in --
4 in economics was in econometrics.

5 [Reporter requests clarification.]

6 THE WITNESS: Econometrics, which is the
7 statistical application -- or the application of
8 statistical theory and methods in economics.

9 I have also applied statistics in many
10 other areas. And in the late '90s, conjoint had,
11 like, its first breakthrough more like in -- in
12 consulting. At that time, I worked for Arthur
13 Andersen's business consulting division. So as not
14 an -- an auditor or tax person. There was a
15 business consulting division. And that's kind of
16 like the first times that I studied conjoint and
17 applied conjoint more in a -- a business consulting
18 sense. More specifically, I do remember quite a few
19 engagements where, in the ~~lead-of~~ ^{lead-up to} the whole dot-com
20 boom, companies came up with new ideas, new
21 products, or addition to products, changes in
22 existing products and --

23 [Reporter requests clarification]

24 THE WITNESS: Changes in existing
25 products.

1 of years or hours, and it's the comparison and the
2 long-term warranty. Those are three claims that
3 best reflected the longevity.

4 Q. Part of your definition of "longevity
5 claims" includes a representation, as stated by you,
6 that "Defendant's LED bulbs will last up to three
7 times as long as the cheap LED bulbs."

8 Do you see that?

9 A. Yes.

10 Q. What is a cheap LED bulb?

11 MR. WOODS: Objection. Beyond the scope.
12 Beyond the scope.

13 You can answer.

14 MS. LINDAHL: They're his words.

15 THE WITNESS: Yeah, I'm just looking at
16 it. There's some quotation marks or that is
17 something that -- it says, "up to three times as
18 long," and unfortunately, there's no footnote, but
19 that's not something I made up, so it's something
20 that I probably -- either it's in the motion or in
21 the -- in the -- in the complaint itself.*

22 BY MS. LINDAHL:

23 Q. The phrase "cheap LED bulbs" is included
24 in one of the attributes that you included in your
25 conjoint study, correct?

*to The claims "up to 3x as long as the cheap LED bulbs" and "6x as long as the cheap LED" are described in paragraphs 22 and 23 of the Amended Complaint as well as on page 10 of the Order re Motion to Dismiss from April 9, 2018.

1 that's just a standard to filter down the group to
2 people who --

3 [Reporter requests clarification.]

4 THE WITNESS: To filter down the group of
5 respondents to people who actually have had -- made
6 the decision to buy the product and then purchased
7 it.

8 BY MS. LINDAHL:

9 Q. Are there any other portions of your
10 pretest survey that have questions or phrasing that
11 is identical to questions or phrasing in documents
12 that Cree produced in discovery?

13 MR. WOODS: Objection. Object to form.

14 THE WITNESS: I don't know because, I
15 mean, these survey questions were -- were in the
16 one -- as I said, the decision-making process is --
17 is always a question in there. The other ones, I
18 would have to -- to talk to staff. If they copied
19 it from here or from some other source, I don't

20 know.*
21 BY MS. LINDAHL: footnote. To clarify, these three questions are not used in
my analysis and have no bearing on the results of my analysis.

22 Q. Is it typical for your staff to copy
23 survey questions from case-related discovery
24 documents?

25 A. I mean, copy survey questions, I mean,

1 There's definitely -- this was given to me and I
2 checked it, and, to me, it was sufficient to explain
3 lifetime in the context of this survey.

4 Q. Do you know why energy costs -- or
5 information about energy costs is included in the
6 definition of "lifetime"?

7 A. I mean, there's a reference to energy, the
8 Department of Energy, five times longer. I don't
9 know. It just seemed to be an add-on here in the
10 definition. I don't know why it was included.*

*The row "Lifetime" in the
conjoint section shows the
lifetime and the savings over
the stated lifetime.
Therefore, the relevant
description includes an
explanation of lifetime
savings as they are shown in
the conjoint module.

11 Q. The -- the row above that includes
12 information about warranty.

13 Do you see that?

14 A. Oh, the whole box above it, yeah, okay. I
15 see that.

16 Q. And the column on the right describes
17 three different warranties, correct?

18 A. Yes.

19 Q. Who drafted the language in that box?

20 A. I mean, that may have also come from --
21 from discussions with Counsel or relative or maybe
22 even from the complaint, so these are, like, three
23 types of warranties that are offered as -- as levels
24 of an attribute in -- in this case.

25 Q. What is meant by the phrase "100 percent

1 trend.

2 Q. So the four levels, do those represent
3 different representations that an LED lighting
4 manufacturer would make on its packaging or other
5 marketing materials?

6 MR. WOODS: Object to form.

7 You can answer.

8 THE WITNESS: I mean, I -- I could imagine
9 that those are -- without pointing to a particular
10 package or marketing material but that those are
11 kind of like items that can be put out. And, again,
12 from just a few pictures we looked at earlier, I
13 mean, the lifetime savings or -- or hours or years
14 of -- of lifespan are on packages in general and are
15 used, right, to basically indicate that products
16 have the longevity attribute or characteristic. And
17 here, I wanted to measure if specifying specific --
18 or specifying the amount of time that the lifetime
19 covers, if there's any correlation, right? You
20 could say at some point, it may flatten out. At
21 other points, it keeps on going. So I just wanted
22 to have data points that enabled me to see if the
23 actual lifetime plays a role. And this is really
24 with respect to ~~devalue~~^{evaluate} a model --

25 [Reporter requests clarification.]

1 THE WITNESS: De -- it's with respect with
2 the goal to ~~devalue~~^{evaluate} a model to show to the trier
3 of fact that this is the model that can be used and
4 it's flexible enough to model different input
5 parameters. I mean, as I sit here right now, I
6 don't know what the exact lifetime is of the
7 products in question, but with this one, I -- I
8 could now model a comparison if the lifetime
9 increases or decreases, right? Will that have an
10 impact on -- on the demand for those products? And
11 the demand would be, you know, how much are people
12 paying for a product like that. That was the reason
13 to -- to include this attribute and choose
14 particular levels.

15 BY MS. LINDAHL:

16 Q. So is this attribute seeking to measure
17 how a consumer would value the difference in the
18 actual lifetime of a bulb or a different
19 representation to the consumer about the lifetime of
20 the bulb?

21 MR. WOODS: Object to form.

22 You can answer.

23 BY MS. LINDAHL:

24 Q. Do you understand what I mean?

25 A. Not quite. I mean, I -- why don't you

1 last six times longer than cheap LED lightbulbs."

2 Do you see that?

3 A. Yes.

4 Q. What do you mean by "cheap LED
5 lightbulbs"?

6 A. I think we -- I testified to that earlier.
7 It's really in comparison to what the consumer sees.
8 So when they now see -- this would be part of a
9 conjoint menu, and they're going to see price of
10 6.99, for example, then it's up to the consumer to
11 see at what point something is cheap. So this is
12 not specified because it's relatively speaking and
13 in comparison to some other product, right?

14 So now, what I wanted to test here is just
15 a statement that rather than giving exact and
16 precise hours and years of lifetime, if there's a
17 comparison statement that indicates that the product
18 that they're buying is -- has more -- higher
19 longevity because of this kind of information, I
20 wanted to test if that plays a role. So this is
21 also not -- it's basically like a -- a conjoined
22 attribute that I'm populating with -- with two -- in
23 this case two levels to just see if there's an
24 effect on the consumer, will demand change if no
25 such information is available or if a product is

1 really more durable by a certain factor than a
2 competing product.*

*The claims "up to 3x as long as the cheap LED bulbs" and "6x as long as the cheap LED" are described in paragraphs 22 and 23 of the Amended Complaint as well as on page 10 of the Order re Motion to Dismiss from April 9, 2018.

3 Q. When -- when you talk about -- or when you
4 include language in the conjoint model around things
5 like "lifetime" and lightbulb lasting a certain
6 amount of time, what are you referring to?

7 A. That's all defined in the bubble, right?
8 I mean, it's basically explained, and now I'm back
9 in -- I don't know -- 14 with the unspecified page
10 starting, "Note: The following content," right? So
11 it basically explained what lifetime in that context
12 means and also to comparison to a cheap one. It
13 just explained what that means in the context of the
14 study. And it is -- there's no absolute definition,
15 as in content -- or context definition when I'm
16 seeing -- not I, but the participant sees the choice
17 menus, then they know "lifetime" in this context
18 means that, and then they -- they read the actual
19 labels, as you can see later on, all these examples,
20 and it uses very specific X years, Y years, X hours,
21 Y hours. So it says lifetime is meaning this, and
22 here are the different levels.

23 Q. Are you --

24 A. It's kind of a self-contained explanation
25 within the conjoint menu.

1 So in the end, all of these different
2 attribute combinations are randomly assigned to the
3 options, and in this case is -- the attribute name
4 is always, I think, in the very left column. Here,
5 let me look at the -- the screenshots and verify
6 that there's not another one.

7 Yeah, so that's the -- the Edgewood is
8 there, and then it basically -- if a particular
9 binary attribute is not present, then it's left
10 blank. So no -- somebody who has an option that has
11 no entry, it's basically left blank, that's what the
12 blank means, so almost like an instruction to the
13 programmer, right? No -- we didn't want them to
14 write "no claim." We just wanted them to leave
15 the -- the box plain.* *It does not matter whether the cell is
 blank or contains "no claim".

16 Q. Why didn't you want them to write "no
17 claim"?

18 A. I mean, it's -- it's -- I decided to,
19 like, leave it blank because then it's just
20 information that is not there and that means there's
21 nothing said about six times larger -- or longer
22 than the cheap lightbulbs.

23 Q. So the document that was marked as
24 Exhibit 14 with the screenshots --

25 A. Yes.

1 prices that were actually chosen are the one in my
2 report.

3 Q. So --

4 A. And then the report mentions the -- the
5 conjoint choice menu.

6 Q. So at one point before your report was
7 finalized, were you considering using the price
8 levels that start on page 10 and continue onto page
9 11 of Exhibit 15?

10 A. I mean, this is what I considered, right?
11 So this -- as I said, this may just be an earlier
12 draft which then wasn't even discussed with the --
13 with the vendor because the vendor used the data
14 points you see in my report that are also reflected
15 in the -- in the example of the choice menu on
16 Exhibit 14.

17 Q. Do you know why there were different price
18 levels included in Exhibit 15 than ultimately wound
19 up in the conjoint model set forth on Exhibit -- in
20 Exhibit 14?

21 A. I don't recall that.*

22 Q. Okay.

23 MR. WOODS: Is this a good time?

24 MS. LINDAHL: Sure.

25 THE VIDEOGRAPHER: Okay. Going off the

*After I had completed the review of current market prices I realized that the prices originally set for the conjoint study were likely too high. To accommodate the decline in current market prices, I asked the vendor to apply lower prices than listed in the original draft questionnaire.